Economic Cycles and the Social Safety Net

PRWORA concentrated on welfare's role in helping recipients overcome persistent poverty by changing cash assistance rules, adding work requirements, and giving States more control over their welfare programs. What PRWORA ignored, however, was welfare's more traditional roles as a social safety net during cyclical economic downturns and as an automatic stabilizer. The new legislation modified the intent of post World War II legislation such as The Employment Act of 1946, which committed the Federal Government to overtly manage the macroeconomy by allowing the government's automatic stabilizers to function. After PRWORA, the Food Stamp Program is now one of the only assistance programs available based primarily on financial need. The importance of this program will be especially apparent during times of increased economic need, such as recessions.

Eliminating the entitlement status of welfare benefits means States are not obligated to expand programs in times of greatest need. Except for food assistance programs, welfare is funded primarily through capped block grants to the States. Federal fiscal and social responsibility has, therefore, been delegated to State lawmakers, who face increased program costs during economic downturns, but are likely to lack the financial resources to meet these increased costs. Administration and congressional proposals for balancing the Federal budget included significant cuts in outlays for State and local programs. These cuts, when combined with economic distress in a State, will substantially weaken a State's capacity to augment welfare spending. States will likely experience significant financial pressure simply to maintain current spending for welfare.

Changes in State responses to the new welfare environment mean the Food Stamp Program will become more important as a cyclical safety net. We have witnessed in the post-1983 period, a large decline in the share of income going to the lowest 20 percent of households and a large increase in the share of income going to the top 20 percent. Real hourly and weekly earnings have been declining for 20 years and an increasing share of national income has been in the form of capital income, which is captured by the upper end of the income distribution. Increased

income dispersion, with an increasing proportion of working poor near the poverty threshold, heightens the importance of food stamps as a cyclical safety net during economic downturns. Other Federal transfer programs, like unemployment insurance and social security, have relatively strong work and earnings requirements. Poor families with weak employment records either are not eligible for these programs or qualify only for minimal benefits (Gustafson and Levine, 1998).

The Macroeconomy, the Food Stamp Program, and Poverty

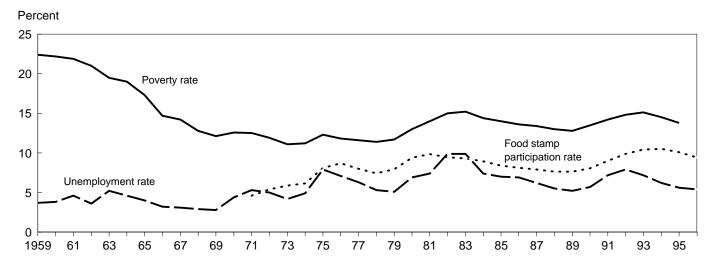
During a recession, unemployment rates rise and real wages fall. Consequently, the average household's budget falls and the amount of money available for food falls. Food stamps ease this burden in two ways. First, food stamps become an important source of assistance for newly eligible households. Second, increases in food stamps from reduced real earnings also augment the incomes of current recipients. Figure 5 illustrates the close historical relationship between changes in the unemployment rate, food stamp participation rate, and the poverty rate.

Several studies have estimated the relationship between macroeconomic conditions and the poverty rate. Using aggregate data on unemployment, inflation, and other macroeconomic variables, Blank and Blinder (1986) considered whether inflation or unemployment was the "cruelest tax" for the poor. Using data from 1959 to 1983, they found that a 1-percentage point increase in unemployment will lead to a 0.7-percent increase in poverty while a 1-percentage point increase in inflation will only lead to a 0.1-percent increase.

In 1964, W. H. Locke Anderson wrote, "the elimination of poverty through 'trickling down' is likely to be slower and more uncertain in the future than in the past." Given an approximately lognormal distribution of roughly constant shape and given a fixed poverty threshold below modal income, successive increments to mean income would move fewer and fewer people above the poverty line. That is, the relationship between GDP growth and poverty was necessarily nonlinear, thereby reducing the effectiveness of overall economic growth as a policy response to poverty.

⁹Gottschalk and Danziger (1985) argue a large portion of the decline in the poverty rate is attributable to increased transfer payments and not just economic growth.

Figure 5
Food stamp participation, poverty, and unemployment rates, 1959-96



Source: From Gundersen, 1998.

Blank's (1993) work examining the relationship between economic growth and poverty suggested the historical relationship between poverty and macroeconomic growth changed during the late 1970's and 1980's. If the historical relationship between the economic expansion and poverty prevailed during this period, then economists would have predicted that the prolonged expansion observed from 1983 to 1989 would have decreased poverty to about 9.3 percent. This would have been the lowest value in U.S. history. By 1989, the measured poverty rate was 12.8 percent, higher than it was in 1979.

Many explanations for the divergence between historical poverty rate, income inequality, and economic growth have been advanced. Such explanations include changing institutional wage-setting mechanisms, a changing labor cohort, a globalizing of production, changing technology, and increasing earnings instability. The literature suggests no single cause is large enough to account for the divergence between economic growth and poverty, but technological change and economic restructuring motivated by increased international competition and the globalization of production are likely the most important explanations.

From 1959 to 1989, per-capita growth averaged a fairly constant 2.7 percent. From 1959 to 1969, the poverty rate declined dramatically. However, the poverty rate declined only modestly during the 1980's. One major difference in the two periods was that from 1983 to 1989 the growth in real-GDP per

employee was only 1.1 percent as opposed to the 2.1-percent growth from 1959 to 1969 (Blank and Card, 1993). GDP growth during the 1980's was driven by increases in labor use (number of hours worked) not productivity growth associated with increased real wages. In addition, wage inequality increased during the 1980's. Although average incomes were increasing, the increase could largely be attributed to income increases of the nonpoor (Blank and Card, 1993). Evidence suggests younger workers earned less than older workers and returns to education were increasing, leaving less educated poor persons less able to reap the benefits of the economic expansion (Cutler and Katz, 1991).

There are more poor people, as defined by the poverty threshold, than food stamp recipients. Not all poor persons qualify for food stamps. Although all people below the poverty threshold meet the income test, they may not meet the asset test. In addition, approximately 30 percent to 40 percent of families eligible for food stamps choose not to participate in the program. Reasons for not participating include expectations of increased income, stigma associated with receiving food stamps, and lack of knowledge about the program. It is possible, therefore, for the number of poor to increase without observing an increase in the number of food stamp recipients or no change in the number of food stamp recipients.

¹⁰For more information about the determinants of participation among the eligible population see Blank and Ruggles (1996).

To gauge the differential effects of changing macroeconomic conditions on food stamp participation and poverty, we estimated models with structures similar to those proposed by Blank and Blinder (1986) and Blank (1993).¹¹ Parameter estimates for the poverty rate equation are consistent with previous studies. These parameter estimates and associated statistics are provided in Appendix A. Two results from the food stamp participation rate equation are interesting. First, inflation, relative to unemployment, is slightly more important for food stamps than the poverty rate. As the real value of AFDC payments declined during the 1980's, demand for food stamps, as a component of welfare transfers, increased. Second, the post-1990 dummy variable is positive and significant only for the food stamp participation model. After 1990, there appears to be a change in food stamp participation rates not reflected in the poverty rate.

Simulations of the effect of a 1-percentage point increase in the unemployment rate, coinciding with a 0.07-percentage point decline in the inflation rate (to reflect the average tradeoff that occurred between these variables over this time period), were performed to demonstrate the impact of a changing macroeconomy. After 1 year, this change led to a 0.29-percentage point increase in the food stamp participation rate (approximately 680,000 more people) and a 0.32-percentage point increase in poverty rate.

We also used the estimated models to examine the impact of an economic downturn on poverty and food

stamp participation rates.¹² The simulations were conducted using CBO's macroeconomic assumptions of 1996 (Base) and a less sanguine alternative, a mild recession beginning in 1997, similar to the experience of the early 1990's. To replicate that recession, we assume an unemployment rate of 7.0 percent in 1998, 7.6 percent in 1999, and 7.0 percent in 2000 and an inflation rate of 2.0 percent in 1998, 1.5 percent in 1999, and 1.5 percent in 2000.¹³ In those years, the CBO assumes an unemployment rate of 6.0 percent and inflation rates of 3.1 percent, 3.0 percent, and 2.9 percent.

As seen in the right side of figure 6, the state of the macroeconomy leads to measurably different food stamp participation paths. ¹⁴ The greatest difference is in 2000 when a mild recession leads to a 10.2-percent participation rate compared to 9.8 percent under CBO's macroeconomic forecast. In this illustration, approximately 750,000 more people would be on food stamps in 2000 due to this mild economic downturn. Increasing poverty rates resulting from a cyclical downturn exacerbate the problem. With a mild recession, the poverty rate in 2000 is 15.6 percent compared to 14.9 percent with CBO's assumptions.

An economic downturn increases food stamp program outlays because program participation increases and food stamp allotments increase for current beneficiaries as real wages fall, work hours are reduced, and jobs are lost. This dual effect is captured here in a model that directly estimates real food stamp program outlays as a function of important macroeconomic variables: real national income, inflation, and the unemployment rate. This model, based on historical information about the relationship between food stamp outlays and the economy is estimated over 1976-96. Parameter estimates and associated statistics are presented in Appendix B. The model illustrates

¹¹The following relationships were estimated: (1)FS_t= $\alpha_1+\alpha_2$ FS_{t-1}+ α_3 U_t+ α_4 I_t+ α_5 t+ α_6 D+ ϵ_t

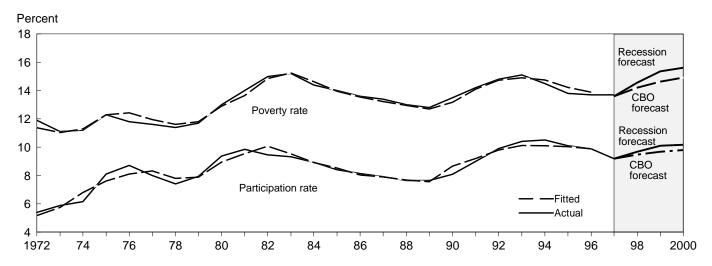
 $⁽²⁾POV_{t} = \alpha_{1}' + \alpha_{2}'POV_{t-1} + \alpha_{3}'U_{t} + \alpha_{4}'I_{t} + \alpha_{5}'t + \alpha_{6}'D + \epsilon_{t}$ where FS is the food stamp participation rate (the number of food stamp recipients divided by the population); U is the male unemployment rate (the number of unemployed males divided by the number of males in the labor force (this rate is a better reflection of the economy's health, especially in the early years of the sample)); I is the inflation rate (from the CPI-U); t is the year; D is a dummy variable, (> 1990= 1); and POV is the poverty rate (the number of persons in households below the poverty line divided by the population). Food stamp participation rates and poverty rates were estimated with annual data from 1971 to 1996. These series began in 1971 when national standards were established and States were required to inform people about food stamp benefits. Due to serial auto-correlation in the poverty rate model, a Cochrane-Orcutt correction was used and is reflected in the parameter estimates.

¹²These simulation models were estimated with historical data pre-dating changes in welfare and food stamp legislation. Simulation results will be less reliable if legislated changes have significantly altered the historical relationship between the macroeconomy and poverty and participation rates.

¹³We assume increases in the unemployment and inflation rates from 1996 for those years are the same as the relative increases in 1991-93 from 1990.

¹⁴This figure also displays the predicted values of the food stamp participation and poverty rates based upon the parameters in Appendix A.

Figure 6
Participation and poverty rates: Fitted and projected, 1972-2000



Source: From Kuhn, LeBlanc, and Gundersen, 1997.

the effects of hypothetical changes in the economy on real aggregate food stamp expenditures.

Two recessions are simulated (fig. 7) and compared with a Base simulation. The Base simulation uses macroeconomic assumptions developed by CBO and discussed earlier in this paper. Simulation (A) illustrates the effects of a mild recession, similar to that experienced during the early 1990's. Simulation (B) illustrates the effects of a more severe recession. Is in this simulation, we assume the percentage change in real disposable income is zero in 1998 and slowly increases to 0.015 in 2004; the percentage change in the consumer price index is 0.025 in 1998 and slowly increases to 0.028 in 2002 and 0.03 by 2003; and the unemployment rate is 0.07 in 1998 and increases to 0.097 by 2000, and then decreases to 0.07 by 2004.

In addition to the Base and recessionary simulations, we simulate the effects of a continued robust economy on food stamp expenditures (fig. 7). In this simula-

tion, designated as C, we assume the unemployment rate is 5 percent, the percentage change in the CPI is 2.3 percent, and the percentage change in real national income is 3.8 percent in 1998 through 2000, reverting to the CBO Baseline in 2001. Assumptions for the 1998-2000 period reflect the most recent 1997 estimates for the associated variables.

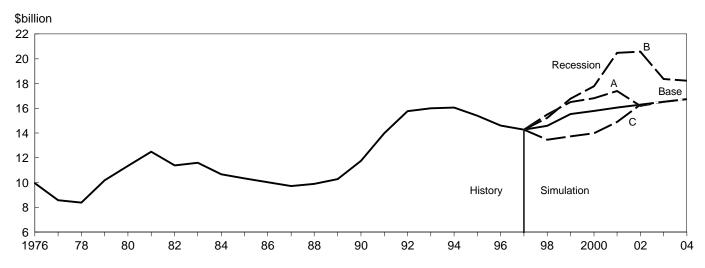
When real food stamp expenditures are simulated over 1997-2004, food stamp expenditures increase even in the Base to \$16.7 billion. This increase is attributed to the trend effects of the number of people in poverty. 16 Food stamp expenditures increase even though there is only a minor increase in unemployment, 5.4 to 6 percent, real national income increases 2 percent annually, and inflation is constant at 3 percent. In the mild recessionary scenario, Recession A, real food stamp outlays increase to a high of \$17.4 billion in the year 2001 and return to base levels by 2002. In this scenario, the unemployment rate peaks at 7.6 percent in 2000 and then declines to base levels. From 1997 to 2004, Recession A leads an additional \$4.2 billion in food stamp outlays. The more severe recession (B) results in an additional \$17 billion in food stamp outlays. Annual outlays peak in 2002 at nearly \$20.6 billion. This longer and more severe recession continues until 2005, with unemployment rates as high as 9.7 percent in 2000.

¹⁵The following relationship was estimated:

 $RFS_t^=\alpha_1+\alpha_2$ $POV_t+\alpha_3U_{t-1}+\alpha_4INC_t+\alpha_5CPI+\alpha_6D+\epsilon_t$ where RFS is real food stamp expenditures; U is the male unemployment rate (the number of unemployed males divided by the number of males in the labor force); CPI is the percentage change in the inflation rate (from the CPI-U); t is the year; D is a dummy variable, (1990+ = 1); POV is the number of persons in households below 125 percent of the poverty line; INC is the percent change in real domestic income. Food stamp participation rates and poverty rates were estimated with annual data from 1976 to 1996; R^2 is 0.997; Durbin-Watson Statistic is 2.15; all variables are significant at the 99-percent level except the percentage change in real domestic income which is significant at 87-percent level.

¹⁶Simulations include declines in food stamp outlays as estimated by CBO.

Figure 7
Simulated food stamp expenditures (\$1984)



Source: Authors' calculations.

What happens if the economy remains strong? Real food stamp outlays continue to decrease. After reaching a peak in 1994 of a little over \$16 billion, food stamp outlays decrease until 1998 where they fall to \$13.5 billion. After 1998, outlays begin to grow as even a strong general economy cannot offset the trend growth in poverty. Although outlays remain less than Baseline levels, they begin to increase in 1999 and return to Baseline levels in 2002. In this illustration, total savings to the food stamp program from a continued strong economy reach nearly \$6 billion over the period 1997 through 2002.

The Macroeconomy and TANF: Recent Experience

The United States is in the third longest economic expansion in the 20th century. Since 1992, there has not been a quarter of negative growth rate. Sharp declines in AFDC (now TANF) caseloads in every State have coincided with the economic expansion. In some States the declines are very large. In Wisconsin for example, the number of AFDC recipients fell 48 percent between 1993 and 1996, and Oregon caseloads fell by 43 percent.

In a widely publicized study, the President's Council of Economic Advisers (CEA) considered the factors leading to the declining caseloads (CEA, 1997). They analyzed how State AFDC caseloads change as a function of a State's unemployment rate, its generosity of AFDC benefits, and the date States applied for waivers and the types of waivers requested. The CEA

found that 44 percent of the decline in AFDC caseloads was due to economic expansion and 31 percent was due to changes in the States' welfare programs.

These estimates have been cited as evidence of the success of welfare reform, but the results are controversial. The CEA study methodology has been criticized by Martini and Wiseman (1997). They argue the CEA's analysis overstates the impact of welfare changes as represented by State waiver programs, because of the time between waiver approval and implementation may be long. Others researchers have estimated lower impacts of welfare reform than the CEA. For example, Ziliak *et al.*, 1997, found that for the 26 States experiencing at least a 20-percent decline in AFDC caseloads between 1993 and 1996, 78 percent was attributable to the macroeconomy and only 6 percent to welfare waivers.

The relative importance of cause of declining welfare caseloads has important implications for the Food Stamp Program. Like TANF caseloads, food stamp caseloads have declined significantly. The number of food stamp recipients from January 1996 to June 1998 fell from 25.9 million to 19.3 million persons (fig. 8). U.S. Department of Health and Human Services figures show that 90 percent of AFDC/TANF recipients are also food stamp recipients and families tend to move on and off multiple welfare programs (Meyer and Cancian, 1996). Thus, while part of this decline in food stamp participation can be attributed to the ineligibility of immigrants and unemployed childless, able-bodied adults, some of the decline is due to the

same forces underlying the recent decline in AFDC/TANF caseloads.

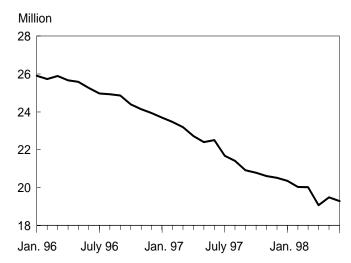
If welfare reform has produced permanent changes in welfare caseloads, the impact of future recessions on food stamp participation rates will be mitigated. If, however, the recent decline is primarily due to economic expansion, the decline in food stamp participation rates reflected in figure 8 are temporary; during the next recession, food stamp participation rates will increase following historical patterns. Irrespective of the success of welfare reform, two factors will lead to an increase in food stamp expenditures during an economic downturn. First, as families are forced off TANF due to the expiration of time limits and enter into a contracting labor market, incomes will fall, leading to an increase in their food stamp benefits. Second, if States transfer funds from cash to noncash assistance programs (subsidized day care, for example) the income of TANF recipients will fall leading to an increase in food stamp benefits.

If welfare reform, rather than the economic expansion, is responsible for the recent decline in food stamp caseloads and this is a permanent decline, the impact of the next recession on food stamp expenditures will be mitigated. If, however, the economic expansion is

the prime mover for the recent decline in food stamp caseloads, the impact of future recessions on food stamp expenditures will be similar to previous ones. The impact will likely be even greater because of the potential fiscal inability of States to increase TANF payments. If this occurs, average incomes will fall, leading to an increase in food stamp benefits.

Figure 8

Number of food stamp recipients
(Jan. 1996-June 1998)



Source: U.S. Department of Agriculture, Food and Nutrition Service, various years.